

REMARKS

In view of the foregoing amendments and the following remarks, reconsideration, reexamination, and allowance of the present application is respectfully requested.

Initially, the Examiner is thanked for initialing and returning the Information Disclosure Statement submitted on December 18, 2001.

The Examiner is also thanked for the careful review of the claims and for indicating which terms in Claims 1 and 12 lacked antecedent basis. Claims 1 and 12 have been amended to address the specific concerns identified in the Office Action.

Further, each of the claims has been reviewed to ensure that each claim term is used consistently and has proper antecedent basis. As a result, Claims 1-4, 6-9, and 11-14 have been amended to use consistent language throughout the claims, to provide antecedent basis for each claim term, and to place the claims in a more conventional method claim format.

With respect to the observation in the Office Action that some of the claim terms lack clarity, it is believed that the scope of the claims can be readily determined when read in light of the Specification.

Accordingly, withdrawal of the rejection of Claims 1-18 under 35 U.S.C. § 112, second paragraph, is respectfully requested.

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Should the Examiner have any questions regarding the foregoing claim amendments, or about the application in general, she is cordially invited to contact the undersigned at the number listed below in order to resolve such concerns.

Respectfully submitted,

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Date: March 7, 2003

Attachment to Amendment under 37 C.F.R. § 1.111 dated March 7, 2003

Marked-up Claims 1-14

1. (Twice Amended) A method for manufacturing a device [with an] including a thin, flexible integrated circuit chip with at least one active [surface] face, a first of the at least one active faces being provided with at least one connection pad, and an opposite face arranged opposite said first face, said method comprising [the steps of]:

[initially providing a thin, active circuit which has mechanical flexibility;]
affixing the opposite face of the chip [thin active circuit] to a stiffening substrate [via its opposite face] to form an assembly composed of the [thin active circuit] chip and the stiffening substrate;

forming on [in the general plane of] a face of a [final] support a communication interface having at least one element for connection with the [active circuit] chip;

presenting [this] the assembly [, comprising the active circuit with its stiffening substrate,] against the communication interface, with the connection pad against a corresponding connection element of the communication interface;

fixing and electrically coupling the connection pad with [a] the corresponding connection element; and

removing the stiffening substrate from the opposite face.

2. (Twice Amended) A method according to Claim 1, wherein the communication interface comprises at least one of an ohmic contact area and antenna area

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produced on a portion of the face of the support which is coplanar with [protruding on a portion of a surface in] the general plane of the face of the [final] support.

3. (Twice Amended) A method according to Claim 1, wherein the fixing and electrical coupling of the connection pad [is fixed and coupled with its respective] to the corresponding connection element [by] includes welding the connection pad to the corresponding connection element [by means of a laser beam which passes through the stiffening substrate and the active circuit,] by passing a laser beam through the stiffening substrate and the chip, said substrate and [circuit] chip being transparent to the wavelength of the laser beam used for the welding, [whilst] wherein at least one of the pad [and/or] or the connection element is fusible under the effect of said laser beam.

4. (Twice Amended) A method according to claim 1, wherein the support [for fixing the active circuit] is in a roll form.

6. (Twice Amended) A method according to claim 1, further including a step of:

cutting the assembly [including the active circuit and the stiffening substrate] into [an assembly cut] a form corresponding substantially to the dimensions of the [circuit] chip, before the step of presenting [this] the assembly.

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7. (Twice Amended) A method according to claim 1 wherein [each] the connection pad is fixed with its [respective] corresponding connection element by applying a compression force [that is applied] through the stiffening substrate of the assembly.

8. (Twice Amended) A method according to Claim 6, wherein the [connection pad] is fixed and coupled with its respective connection element by] fixing and electrically coupling includes welding by means of a laser beam which passes through the stiffening substrate and the [active circuit] chip, said substrate and [circuit] chip being transparent to the wavelengths of the laser beam used for the welding, [whilst] wherein at least one of the pad [and/or] the connection element is fusible under the effect of said laser beam.

9. (Amended) Tooling for implementing the method according to Claim 8, comprising a laser with a wavelength of $1.06 \mu\text{m}$, whose beam is transmitted by a plurality of optical paths, each of the optical paths directed towards a respective pad of the [active circuit] chip, in order to effect welds in parallel.

11. (Twice Amended) Tooling according to Claim 9 wherein the optical paths are integrated in a tool for positioning and/or holding the assembly [vis-à-vis] with respect to the [final] support.

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12. (Twice Amended) A device with an integrated-circuit chip comprising:
at least one [active circuit] chip with a front face provided with at least one
connection pad and an opposite face[, said active circuit being a thin active circuit which
has mechanical flexibility,];

a substrate, said chip being [and which is] mounted on said [support] substrate;
a support having an interface in [the] an overall plane of one face of the support for
communication with [at least one element for connection with] the [active circuit] chip
including at least one connection element; and[;]

.....
said connection pad being fixed and electrically coupled against a corresponding
connection element [on] of said interface.

13. (Twice Amended) A device according to Claim 12, further including a
protective film over the [surface] face of the support.

14. (Twice Amended) A device according to Claim 12 wherein the thickness of
the connection elements, [and of] the [active circuit] chip, and the [with its] pads together is
less than 50 microns.